

Description of Security Systems — a Few Reflections

Bernard Wiśniewski

ORCID: 0000-0002-0011-7271

Police Academy in Szczytno, Poland

Abstract. *This article presents fundamental issues concerning the description of the security system of an organization understood as an entirety composed of people equipped with tools, machines and materials, which are connected with one another by a specific bond and between which there are relations connected to ensuring an undisturbed existence and creating opportunities for development. The description of security systems is a complex undertaking. It is a consequence of its complexity, which is primarily a result of the set of relations between organizational elements. They include: accumulation (expressed in the number of hierarchical levels, range (related to the number of subordinations and dependencies), spread (associated with the number of elements subordinate to a single superior at each organizational level), organizational cohesiveness (connected to the mutual structural and functional dependencies between organizational elements due to performed tasks), information links (reflecting the channels and network of information flow), as well as the division of powers (associated with the right to make decisions), and division of duties (related to the relationship between organizational elements). The complexity of the description of security systems is also determined by the activity of the organization's security systems, which can be divided into: material (concerning the types of activities), temporal (related to the order of its conduct in a specific time), and spatial (connected to conducting activities in specific places). The description of security systems is only possible through the use of: appropriate methodological procedures and a systemic approach, as characterized within the constraints resulting from the expression formula. This paper also indirectly addresses the determinants of the description of security systems. These are: up-to-date knowledge, concreteness and reliability of the description and sufficient detail.*

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Introduction

Security concerns are omnipresent. Security in its broadest sense is seen as “freedom and the ability to protect against constant and imminent threats that have always accompanied mankind. With the development of civilization, the approach, perception and organization of the security system have changed. Anticipating, avoiding or minimizing the effects of threats has become a challenge for modern generations. Today, the diversity of risk minimalization activities is generating a need for scientific interest across several scientific disciplines”¹.

The meaning of the term “security” is manifold. Security is treated, among other needs, as “a basic category that makes human life require its activity aimed

¹ Ścibiorek Z, Tożsamość nauk o bezpieczeństwie, [in:] Ścibiorek Z, Zamiar Z (Eds), Teoretyczne i metodologiczne podstawy problemów z zakresu bezpieczeństwa. Podręcznik akademicki. Toruń, 2016, p. 201.

at satisfying all needs. It is a good that allows for the development of activities focused on self-fulfillment. In this sense, it is therefore a condition for effective operation. It can also be a desirable value, manifested in a situation of insecurity. A change in this state of affairs, i.e. the achievement of stability, certainty and the guarantee of the fulfillment of one's own interests, is conducive to the identification of the notion of security with the objective of action. Security is a state that gives a sense of safety and guarantees both its preservation and a chance for improvement. It is a need characterized by the absence of the risk of losing something that people particularly value².

The omnipresence of threats in the security environment of any organization makes it necessary to build systems, the essence of which is to prevent threats and minimize the effects of their possible occurrence. There is no doubt that "security measures are usually arranged in a rather complex system, followed by subsystems dependent on one another. This means that various risks and the resulting different security systems can be selected"³.

It should be noted that "although not a day goes by that security is not discussed, the meaning of the term is often very vague. This is not due to negligence, but to the fact that security is a derivative concept — what a person understands by it is derived from his or her views"⁴. The same applies to security systems, and in particular to the description of such systems.

The description of security systems requires a clarification of several terms relevant to the subject under consideration. These are: methodology, system, systemic approach, model and modeling. They will be briefly explained below in order to meet the needs arising from the constraints of the expression formula.

Methodology (in Greek: "methodos" — research, "logos" — science) is a science that deals with methods of scientific research and effective ways of searching for their cognitive value. Therefore, it is nothing more than a strictly defined course of action, making it possible to achieve particular goals. It is also a way of organizing actions on the basis of their purpose or, in other words, a method theory⁵.

Scientific research is characterized primarily by a precise separation of the area and subject of research. This also applies to security tests.

The basis for theoretical considerations in security sciences is the establishment of its paradigm (in Latin: *paradigma*, *paradigmatis* — pattern), which "as a style of thinking and perceiving the world implies a particular vision of reality and creates a characteristic pattern or model of research procedure as a way of putting and solving problems. These assumptions (...) shape the researcher's approach to research theory and methods"⁶. The literature of the subject generally identifies four elements forming the security paradigm, i.e. subject, object, environment

² *Ibid.*

³ Kaczmarek J, Skowroński A, Bezpieczeństwo. Świat — Europa — Polska. Wrocław, 1998, p. 5.

⁴ Bilgin P, Nowe ujęcie bezpieczeństwa, [in:] Williams P.D (Ed.), *Studia bezpieczeństwa*. Cracow, 2012.

⁵ Jemiolo T, Dawidczyk A, Wprowadzenie do metodologii badań bezpieczeństwa. Warsaw, 2008, p. 17.

⁶ Ziarko J, *Paradygmaty i orientacje badawcze w nauce o bezpieczeństwie. Bezpieczeństwo. Teoria i praktyka*, 2008, Vol. 1–2 (I), p. 10.

(surroundings) and relations between the indicated elements⁷. There is no doubt that the security paradigm is created by knowledge from many sources subject to dynamic change.

In the context of the above, it is worth noting, following Aleksander Kamiński, that “there is a tendency to undertake the research method as a set of theoretically justified conceptual and instrumental procedures covering, in the most general sense, the entire conduct of a researcher who aims at solving a specific scientific problem”⁸, and that, according to Tadeusz Pilch, the method is “a set of theoretically justified conceptual and instrumental procedures covering, in the most general sense, the entire conduct of a researcher who aims at solving a specific scientific problem”⁹. So much for the introduction.

The concept, essence and types of systems

Now is the time to explain the concept of “system”. It originates from the Greek word “systematiós” which means “juxtaposed”¹⁰.

In the past, the terms “system” and “arrangement”, in relation to security and its components, were used interchangeably. This should be considered as erroneous given the ambiguity of the term “arrangement” in social and legal sciences, as well as the fact that:¹¹

- a system may be in different states and its elements in different arrangements, hence the scopes of meaning of the system and the arrangement are distinctive;
- the term “arrangement” is used to describe sets that do not meet the conditions of dynamism and purposefulness attributed to developing and relatively permanent systems.

Before proceeding with the identification of a system, it is worth noting Jan Zieleniewski’s observations with reference to considering an arrangement. If its elements are in some respect organized, then it should be identified, in this regard, as a system¹².

In the context of the previous considerations, it should be noted that:

- an arrangement is a set of things and characteristics which, by definition, does not change its state over time, does not develop its actions and is not subjected to management;

⁷ Pieczywok A, Wybrane problemy z zakresu edukacji dla bezpieczeństwa. Warsaw, 2011, p. 60, and Zięba R, O tożsamości nauk o bezpieczeństwie. *Zeszyty Naukowe AON*, 2012, Vol. 1(86), pp. 13–16.

⁸ Kamiński A, Metoda, technika, procedura badawcza w pedagogice empirycznej, [in:] Wroczyński R, Pilch T (Eds), *Metodologia pedagogiki społecznej*. Wrocław–Warsaw–Cracow–Gdańsk, 1974.

⁹ Pilch T, *Zasady badań pedagogicznych*. Warsaw, 1998,

¹⁰ Kopaliński W, *Słownik wyrazów obcych i zwrotów obcojęzycznych z almanachem*. Warsaw, 1994, p. 492.

¹¹ Rogucki A, *Analiza systemów w planowaniu obrony. Aspekty ekonomiczno-polityczne*. Warsaw, 1975, p. 89.

¹² Zieleniewski J, *Organizacja zespołów ludzkich*. Warsaw, 1964, p. 41.

- a system is a dynamic arrangement whose elements can change their state over time, can operate and be controlled¹³.

It is also important to mention that each system has a management and executive subsystem.

Due to the fact that the security system functions in a certain environment (surroundings), this environment (surroundings) has a reverse effect on it. It is thus "a set of external elements in relation to the system and interacting with the system. Each system has its own superior system, so it can be said that a hierarchy is defined in the system structure"¹⁴.

The security system can be seen through the prism of operation. It will therefore be a social system (a complex of systems) which, together with the necessary modes and means of action, sets and then pursues specific objectives¹⁵.

Based on the considerations presented so far, this part of the study analyzes the main problems concerning the assumptions of the security system description in order to characterize and introduce the organizational aspects of the security system operation.

In general terms, "system" means:

- "a list, a comprehensive and ordered arrangement, a set of objects, principles and theorems, rules of conduct"¹⁶;
- "a coordinated arrangement of elements, a set forming a certain whole conditioned by a constant and logical order"¹⁷;
- "a comprehensive and structured set of tasks linked to one another by logical inquiry relationships"¹⁸.

Similarly, the aforementioned term is specified in the Dictionary of the Polish language¹⁹ where it is defined, among others, as:

- an established order of doing something, rules of functioning;
- a set of theorems forming some kind of theory.

According to the Encyclopedia of Organization and Management, the term "system" should be understood as a set, separated from the environment, of material or abstract elements with internal connections and considered as a whole²⁰. It is impossible to ignore the explanation of the above-mentioned concept contained in the study "Management with theory and practice", whose authors perceive a system as a set of components between which mutual relations take place (interactions), and where all elements are connected with one another directly or indirectly²¹. Equally interesting is the definition of "system" in the New Universal Encyclopedia of PWN, which identifies the "system" as a set of interrelated elements, separated from the environment by these links, where the links (relations) between the ele-

¹³ Kuleszyński L, Dowodzenie wojskami a cybernetyka. Warsaw, 1967, p. 44.

¹⁴ Kieżun W, Podstawy organizacji i zarządzania. Warsaw, 1975, pp. 204–205.

¹⁵ Sienkiewicz P, Teoria efektywności systemów kierowania, Tom 1, Wstęp do systemologii, doctoral dissertation. Warsaw, 1979, p. 263.

¹⁶ Kopaliński W, *op. cit.*, p. 492.

¹⁷ Słownik języka polskiego. Vol. 3, Szymczak M (Ed.). Warsaw, 1981, p. 387.

¹⁸ Słownik wyrazów obcych. Sobol E (Ed.). Warsaw, 1995, p. 1065.

¹⁹ Arnold A, Słownik języka polskiego. Warsaw, 2011, p. 289.

²⁰ Encyklopedia organizacji i zarządzania. Warsaw, 1981, p. 508.

²¹ Koźmiński A.K, Piotrowski W, Zarządzanie, teorią i praktyką. Warsaw, 2000, p. 761.

ments of the system form its structure, and as a set of ways (methods) of operation, performance of complex activities, as well as a totality of principles of organization, and a whole of norms and rules in force in a given field²². The Military Knowledge Lexicon also provides interesting information, namely a multifaceted view of the concept of "system", which is defined there as follows:²³

- any internally coordinated and structured arrangement of elements;
- a set of ways (methods) of operation and performing complex activities;
- overall organizational principles, norms and rules in force in a given field;
- a comprehensive and structured set of tasks connected with one another by defined logical relationships.

The definitions of the term "system" presented above are characterized by a synthetic representation of the essence of the term. More knowledge and information regarding the system description can be found in theoretical studies. Thus, by the term "system" Piotr Sienkiewicz understands a specific phenomenon in nature and society consisting of particular elements, between which specific interactions occur. The system therefore has a structure, and in cybernetic terms it is characterized by dynamism and fulfillment of a specific function²⁴. The system can be seen as "a deliberately defined set of components and a set of connections between them that all together determine the properties of the whole"²⁵. In turn, Witold Kieżun describes the system as a separate whole of the surrounding reality, having a distinct structure, and thus consisting of parts ordered according to established rules that define their mutual relations²⁶.

The analysis of the definitions presented above leads to the conclusion that "system" fulfills the following conditions:

- it has its own structure consisting of individual entities and relationships between them;
- it is separated from a larger whole and has the limits of that separation;
- it has a set of rules that define its functioning.

On the basis of the considerations presented above, in the remaining part of this study, following Piotr Sienkiewicz, it is assumed that the system is complex, distinguished from the examined reality, presented as a certain whole and created by a set of elementary objects (elements) and connections (relations) between them²⁷.

The description of security system features would not be possible without a brief characterization of systems. There are many typological criteria for systems. However, the limitations of this paper allow for the presentation of those which, due to the subject and object of the study, are considered the most useful.

It seems that the basic typological criterion is the size of a system. P. Sienkiewicz divides the system in this respect into three size classes:²⁸

²² Nowa encyklopedia powszechna. Vol. 6. Warsaw, 1995, p. 152.

²³ Leksykon wiedzy wojskowej. Warsaw, 1979, p. 426.

²⁴ Sienkiewicz P, Inżynieria systemów. Warsaw, 1983, p. 35.

²⁵ Habr J, Veprek J, Systemowa analiza i synteza. Warsaw: PWE, 1976, p. 32.

²⁶ Kieżun W, Sprawne zarządzanie organizacją. Warsaw, 1997, p. 13.

²⁷ Sienkiewicz P, Teoria efektywności systemów kierowania. Vol. 1. Wstęp do systemologii. Warsaw, 1979, p. 82.

²⁸ Sienkiewicz P, Podstawy teorii systemów. Warsaw, 1993, p. 47.

- 1) simple — consisting of elementary objects, none of which can be considered a system;
- 2) complex — consisting of objects, of which at least a few can be treated as simple systems;
- 3) large — consisting of objects defined at least as simple systems.

In a similar way, but in a different aspect, speaks Władysław Mróz, who proposes to divide the system according to the same criteria:²⁹

- simple, characterized by a low number of internal links and no difficulty in mathematical description;
- complex, characterized by the fact that it can be described mathematically, but with great difficulties due to the branched structure and a larger number of internal connections;
- very complex, characterized by the fact that it is not subject to mathematical description because of the very large branching and complicated internal structure.

Systems may also be divided according to the interchangeability of system components during their operation. These systems are categorized as: open, closed and sealed. On the other hand, in terms of subject and object, systems can be divided into two groups: real (representing a specific reality) and conceptual (certain thought constructions). In turn, the former can be categorized as homogenous (uniform in the sense of class features) and heterogeneous (combining system features of particular classes of homogenous systems)³⁰.

Model and modeling

One of the methods of the systemic approach is modeling which, in the context of security, serves to construct an image that constitutes a specific pattern. Modeling is a process of constructing a picture of a particular fragment of reality, called the original, expressed in the accepted language (code) with the help of a specific research method and according to the knowledge in the subject³¹. Systemic modeling, however, means “the totality of cognitive undertakings connected with the creation of models and objects, the knowledge of which leads to treating it as a system”³². Taking into account the researcher’s experience, intuition and knowledge of the subject of research, one can distinguish three model orientations, such as:³³

- 1) model orientation, the essence of which is to prefer the criteria of logical correctness of a model in the internal dimension, which may be at the expense of adequacy;

²⁹ Mróz W, *Kierowanie i organizacja pracy sztabowej w okresie pokoju*. Warsaw, 1993, p. 110.

³⁰ More: Górski P, *Zastosowanie modelowania systemowego do opisu wybranych elementów systemu obronnego państwa*. Warsaw, 1998, p. 10.

³¹ More: Sienkiewicz P, *Systemy kierowania*. Warsaw, 1974, p. 76.

³² Sienkiewicz P, Urbanek M, Kinasiewicz M, *Zastosowanie modeli analizy sytuacji polityczno-militarnej i społeczno-ekonomicznej do oceny potencjałów bojowych i struktur organizacyjnych Sił Zbrojnych RP*, [in:] Program naukowy „Doskonalenie”. Warsaw, 1992, p. 4.

³³ More: Sienkiewicz P, *Systemy kierowania...*, *op. cit.*, pp. 108–109.

- 2) objective orientation, the essence of which is to favor indicators of model compliance with an arbitrarily selected fragment of reality, which may be done at the expense of the logical correctness of a model;
- 3) subjective orientation, the essence of which is to adapt a task to the capabilities and qualifications of a subject.

In order to provide the basis for a full presentation of the assumptions of the security system description, it seems necessary to clarify the concept of "model" which is understood as:

- "a formalized expression of a theory or relationship which is treated as a generalization"³⁴;
- "a concrete interpretative expression of one theory or several hypotheses"³⁵;
- "meaning a simplified representation, often combined with a certain schematization or stylization"³⁶.

After presenting the main problems concerning the essence of modeling and the model, the typology of the models used in system tests should be introduced. Models can be subdivided according to:³⁷

- the cognitive objective (result of modeling);
- the form of expression (language of modeling);
- the aspect of systemic research.

Thus, the division of models based on cognitive purpose includes the following:³⁸

- evaluation models, the essence of which is to obtain evaluations which are an expression of approval or negation of the state of the system;
- decision models, the essence of which is to obtain strictly defined decisions, necessary to ensure the desired state of a system in view of the adopted criteria;
- designative models, whose essence is to fully explain the features of a system.

On the other hand, the breakdown based on the form of communication includes the following:³⁹

- descriptive models, i.e. expressed in natural language;
- formal models, i.e. expressed in the language of logic;
- mathematical models, i.e. expressed in the language of mathematics.

The division of models according to the adopted aspect of research allows to distinguish three basic forms of the system, namely: morphology, functioning and development⁴⁰.

Characteristics of the systemic approach

Taking into account the above-presented considerations and issues regarding basing all the assumptions of the security system on legal regulations and consequent organizational solutions, it should be stated that they do not allow

³⁴ Krzyżanowski L, *Podstawy nauk o organizacji i zarządzaniu*. Warsaw, 1994, pp. 184–187.

³⁵ Barton R.F, *Wprowadzenie do symulacji gier*. Warsaw, 1989, p. 111.

³⁶ Bojarski W.W, *Podstawy analizy i inżynierii systemów*. Warsaw, 1984, p. 51.

³⁷ *More: Sienkiewicz P, Inżynieria systemów kierowania*. Warsaw, 1988, p. 91.

³⁸ *More: Ibid.*

³⁹ *More: Ibid.*

⁴⁰ *More: Ibid.*

for unambiguous and theoretical identification of this concept. The analysis of documents, however, allows for distinguishing common features of security system elements that combine them into one whole from the point of view of organizational and material properties. This state of affairs permits the security system elements to be considered in four ways, i.e. subjective, objective, structural and formal. In the subjective approach, they constitute the totality of entities performing specific functions (duties) related to providing conditions for secure functioning of system structures. However, from the structural point of view, they should be regarded as entities performing the above-mentioned functions at all organizational levels of the system. The above-presented assumption also allowed to establish that the essence of the objective approach is activity that aims at protecting a particular good. Consideration of all activities carried out by components of the security system, whether or not of material nature, was done in a formal approach. This approach allows for a comprehensive approach to the issue of functioning of almost every security system.

The systemic approach is applied to security for practical reasons. It shapes the abilities of a mechanism responsible for arranging the state of knowledge about security.

Other determinants of the systemic approach include the features of all activities subordinated to the task of achieving and maintaining security, such as: anticipation, adaptation, purposefulness of action and focus on development. These are the characteristics of the systemic approach that remain a modern way of practical operation. Its distinguishing features are:⁴¹

- treating an examined object as a system;
- treating a particular system as an object composed of interconnected sub-systems;
- treating a given system as a part of a larger system;
- conscious use of a system model with a strictly defined level of separation, which identifies a specific aspect of operation.

The use of the systemic approach for security considerations is supported by the following features of this approach:⁴²

- holism, i.e. the exploration of phenomena, objects, processes of events, etc. as a whole;
- complexity, i.e. the disclosure of various connections and internal relations;
- essentialism, i.e. the study of phenomena (objects) from the point of view of crucial characteristics;
- structuralism, i.e. identifying the properties of an object (area) of interest on the basis of those features of its structure that are considered constant and integrative;
- context, i.e. the examination of systems based on their place in a larger whole;
- teleologism, i.e. the consideration of phenomena from the point of view of their purposefulness in a given field, especially in the entire reality;

⁴¹ More: Sienkiewicz P, M. Urbanek, M. Kinasiewicz, *op. cit.*, p. 94.

⁴² Wiśniewski B, *System bezpieczeństwa państwa. Konteksty teoretyczne i praktyczne*. Szcztyno, 2013, p. 115.

- functionality, i.e. analyzing systems with regard to the achieved objectives fulfilled functions;
- effectiveness, i.e. the consideration of systems through the prism of the extent of results of the achieved goals and functions;
- synergism, i.e. the analysis of properties resulting from cooperation and joint action within the system of subsystems and elements of these subsystems, the essence of which is cooperation, considered to be more effective than the sum of their separate operations;
- development, i.e. considering systems in terms of the process of transformations and changes associated with the transition to more complex or, in some respect more perfect, states or forms;

Taking into account the conditions presented in the introduction, which should be met by the system, and the analysis of the competences of the authorities and public administration, it can be said that the elements of the security system in the legal aspect:⁴³

- constitute a distinct whole;
- have a specific property;
- operate within the scope of their competences.

The separation consists in the fact that they have an organizational structure defined by law, ensuring their uniformity.

The property gives an answer to the question what element is used to implement projects that fall within the area of issues of a given type.

The essence of the operation of security system components within the scope of their competence is their functioning within the limits of the defined range of activities assigned to them by law, as well as tasks and responsibilities that make it possible to distinguish them from other systems.

The shape of a security system is determined by the following relationships: normative, informational, cooperative and material. Normative relations are shaped by law. In turn, informational relations move from the environment (information about the external situation) to the inside of a system, and from the executive subsystems to the management subsystem. General cooperative relations occur between executive subsystems, as well as between them and the environment of a security system.

There are three types of material relations: financial, service and service-production. Financial relations are characterized by the budgeting of security expenditure and move from the decision-maker to the executive elements of a security system. Service relations transfer from the executive subsystems to the management subsystem. Service-production relations concern the fulfillment of the needs of all elements of a security system.

Conclusion

At the end of these considerations, it should be noted that there is no such description of “an empirical object as a system that would take into account the possible results of systemic research, expressed as a cognitive (or practical) goal

⁴³ More: *Ibid.*

of systemic theory. The above thesis can be formulated in the form of the principle of relativity of systems, by which we understand the necessity of accepting systemic research as a specific aspect in describing an object as a system⁴⁴. Closely related to this principle is also the assumption of the indefiniteness of systems, the essence of which lies in the fact that the description of complex objects does not allow to be fully sure whether the identified restriction of freedom is attributable to the system or its environment⁴⁵.

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⁴⁴ Sienkiewicz P, Podstawy teorii systemów. Warsaw, 1993, p. 46.

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About the Author

Bernard Wiśniewski, professor, is an academic teacher at the Faculty of Security and Legal Sciences at the Police Academy in Szczytno. He specialises in the issues of: internal security, state security management, defensive preparations of the state and education for security. He is the author and co-author of more than 250 popular scientific studies published in Poland and in several European countries. Correspondence: Wyższa Szkoła Policji w Szczytynie, ul. M.J. Piłsudskiego 111, Poland. E-mail: bfwisniewski@o2.pl.

Streszczenie. W niniejszym artykule zaprezentowano zasadnicze zagadnienia dotyczące opisu systemu bezpieczeństwa organizacji rozumianej jako całość złożoną z ludzi wyposażonych w narzędzia, maszyny, materiały, których łączy ze sobą określona więź i między którymi zachodzą relacje związane z zapewnieniem niezagrażonego bytu oraz tworzeniem możliwości rozwoju. Opis systemów bezpieczeństwa to przedsięwzięcie złożone. Jest to konsekwencją jego złożoności, o czym decyduje w głównej mierze zbiór stosunków zachodzących między elementami organizacyjnymi, do których należy zaliczyć: spiętrzenie (wyrażające się liczbą szczebli hierarchicznych), rozpiętość (związana z liczbą podporządkowań i zależności), rozpiętość (odnosząca się do liczby elementów podporządkowanych na poszczególnych szczeblach organizacyjnych jednemu zwierzchnikowi), spójność organizacyjna (będąca wyrazem stopnia wzajemnej zależności strukturalno-funkcjonalnych pomiędzy elementami organizacyjnymi ze względu na wykonywane zadania), powiązania informacyjne (odzwierciedlające kanały i sieć obiegu informacji), a także podział uprawnień (związana z prawem do podejmowania decyzji), podział obowiązków (odnoszący się do więzi między elementami organizacyjnymi). O złożoności opisu systemów bezpieczeństwa decyduje również działalność systemów bezpieczeństwa organizacji, którą można podzielić na: rzeczową (dotyczącą rodzajów działań), czasową (odnoszącą się do kwestii kolejności jej prowadzenia w określonym czasie) oraz przestrzenną (związaną z prowadzeniem działań w konkretnych miejscach). Opis systemów bezpieczeństwa jest możliwy wyłącznie poprzez zastosowanie: stosownych procedur metodologicznych oraz podejścia systemowego, co scharakteryzowano w ramach ograniczeń wynikających z formuły wypowiedzi. W niniejszym opracowaniu pośrednio odniesiono się również do wyznaczników opisu systemów bezpieczeństwa. Są nimi: aktualność wiedzy, konkretność i niezawodność opisu oraz wystarczająca szczegółowość.

Резюме. В статье представлены основные вопросы, связанные с описанием системы безопасности как организации в целом, состоящей из людей, оснащенных инструментами, машинами, материалами, связанных друг с другом специфической связью и между которыми существуют отношения в сфере обеспечения беспрепятственного существования и создания возможностей для развития. Описание систем безопасности — сложное дело. Это является результатом сложности самого процесса, который обусловлен главным образом набором отношений между организационными элементами, к которым следует отнести: накопление (число уровней иерархии), масштаб (количество подчиненных и зависимостей), диапазон (количество элементов, подчиненных одному руководителю на каждом уровне организации), организационную сплоченность (являющуюся результатом совмещения структурно-функциональных взаимосвязей между элементами организации в связи с выполнением задач), информационные связи (отражающие каналы и сеть информационного потока организации), а также распределение полномочий (связанное с правом принимать решения), разграничение обязанностей (связанное с общими связями между элементами системы управления). Сложность описания систем безопасности определяется также функционированием систем безопасности организации, которые можно разделить на две категории: предметную (в связи с видами деятельности), пространственную (связанную с осуществлением деятельности в конкретных местах). Описание систем безопасности возможно только при использовании: соответствующих методических процедур и системного подхода, которого дается лишь частичная характеристика по поводу объема статьи. В данной статье представлены также некоторые детерминанты описания систем безопасности, т.е.: актуальность знаний, конкретность и достоверность описания, а также достаточная их детализация.

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